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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,623	04/17/2001	Hidetoshi Iwashita	826.1725	7538

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EXAMINER

NAHAR, QAMRUN

ART UNIT	PAPER NUMBER
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2124

DATE MAILED: 08/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/835,623

Applicant(s)

IWASHITA, HIDETOSHI

Examiner

Qamrun Nahar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to the amendment filed on 7/9/04.
2. The objection to the drawings is withdrawn in view of applicant's submission of replacement sheets.
3. The rejection under 35 U.S.C. 102(b) as being anticipated by A. Griewank, D. Juedes, J. Utke, "Algorithm 755: ADOL-C: A Package for the Automatic Differentiation of Algorithms Written in C/C++", hereinafter ("Griewank") to claims 1-10 is moot in view of the new ground(s) of rejection.
4. Claims 1, 5 and 7-10 have been amended.
5. Claim 11 has been added.
6. Claims 1-11 are pending.
7. The objections to claims 9 and 10 are pending.
8. Claims 5-7 and 10 stand finally rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
9. Claims 1-11 stand finally rejected under 35 U.S.C. 102(e) as being anticipated by Detlefs (U.S. 6,161,217).

Response to Remarks

10. Applicant states on page 7, par. 4 to par. 6:

"On pages 5 and 6 of the Action the Examiner recognized that the present invention, as described on application page 13, line 22 to page 14, line 10 and in figure 4, expands a procedure

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call outside of the program being complied and in a separate file. Griewank discusses compiling but does not discuss expanding a procedure of a program call outside of the program.

Independent claims 1, 5, 7, 8 and 9 have been amended to emphasize this feature of expanding outside the program.

It is submitted that the present claimed invention patentably distinguishes over Griewank and withdrawal of the rejection is requested.

New claim 11 has been added to particularly emphasize the expansion of the procedure call as a subprogram as described in the portion of the application noted by the Examiner. As recognized by the Examiner, nothing in the prior art teaches or suggests such. It is submitted that the new claim distinguishes over the prior art."

Examiner's Response:

For the clarification of the record, the Examiner did *not* indicate allowable subject matter. The Examiner merely pointed out a feature of the instant invention that had not been clearly claimed.

Response to Amendment

Claim Objections

11. Claims 9 and 10 are objected to because of the following informalities: the status of these claims has been indicated as original. However, amendments have been made to claims 9 and 10. These claims have been treated as "(currently amended)".

Claim Rejections - 35 USC § 112

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claims 5-7 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

14. Claims 5 and 7 recite the limitation "an expansion code" in line 11 and lines 10-11 of the claims, respectively, which renders these claims indefinite because it is unclear whether this is another expansion code. Therefore, this limitation is interpreted as "the expansion code".

Claim 6 is rejected for dependency upon rejected base claim 5 above.

15. Claim 10 recites the limitation "the program code" in line 10 of the claim. There is insufficient antecedent basis for this limitation in the claim. This limitation is interpreted as "the expansion code".

Claim Rejections - 35 USC § 102

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this

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subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

17. Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Detlefs (U.S. 6,161,217).

Per Claim 1 (Amended):

The Detlefs patent discloses:

- **a compiler system for compiling a first program into a second program** (“A computer system (10) is configured as a compiler to translate source code (FIG. 4) into object code (FIG. 6).” in abstract and column 5, lines 55-59)
- **a converter converting a part of the first program into a procedure call and generating the second program including the procedure call** (column 5, lines 59-67 to column 6, lines 1-2)
- **a generator generating an expansion code describing a definition of a procedure to be called by the procedure call; and an outputting unit outputting the second program and the expansion code generated by said generator, and wherein the procedure call in the second program is expanded outside the second program and to be outputted as the expansion code** (column 6, lines 59-67 to column 7, lines 1-6).

Per Claim 2:

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The Detlefs patent discloses:

- **further comprising a detector which detects a predetermined particular pattern from the first program, wherein said converter converts the pattern detected by said detector into a procedure call corresponding to the pattern** (column 6, lines 59-67 to column 7, lines 1-6).

Per Claim 3:

The Detlefs patent discloses:

- **wherein said detector detects a call for calling a built-in procedure from the first program** (column 6, lines 59-67 to column 7, lines 1-6).

Per Claim 4:

The Detlefs patent discloses:

- **wherein when said detection detects a plurality of identical patterns from the first program, said converter converts the plurality of patterns into a same procedure call** (column 6, lines 59-67 to column 7, lines 1-6).

Per Claims 5 (Amended, as best understood) & 6 (as best understood):

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These are another versions of the claimed compiler system discussed above (claims 1 and 4), wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Detlefs.

Per Claim 7 (Amended, as best understood):

This is another version of the claimed compiler system discussed above, claim 5, wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, this claim is also anticipated by Detlefs.

Per Claim 8 (Amended):

This is another version of the claimed compiler system discussed above, claim 1, wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, this claim is also anticipated by Detlefs.

Per Claim 9 (Amended):

This is a method version of the claimed compiler system discussed above, claim 1, wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, this claim is also anticipated by Detlefs.

Per Claim 10 (Amended, as best understood):

This is a computer-readable storage medium version of the claimed compiler system discussed above, claim 1, wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, this claim is also anticipated by Detlefs.

Per Claim 11 (New):

The Detlefs patent discloses:

- **a method for compiling a program containing a function** (“A computer system (10) is configured as a compiler to translate source code (FIG. 4) into object code (FIG. 6).” in abstract and column 5, lines 55-59)
- **substituting a procedure call for the function** (column 5, lines 59-67 to column 6, lines 1-2)
- **generating expansion code defining a procedure to be called by the procedure call; and generating a subprogram of the program expanding the procedure call** (column 6, lines 59-67 to column 7, lines 1-6).

Response to Arguments

18. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

20. Any inquiry concerning this communication from the examiner should be directed to Qamrun Nahar whose telephone number is (703) 305-7699. The examiner can normally be reached on Mondays through Thursdays from 9:00 AM to 6:30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki, can be reached on (703) 305-9662. The fax phone number for the organization where this application or processing is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

QN
August 3, 2004

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